

# PATENT ABSTRACTS OF JAPAN

(11)Publicatio

n number :

09-241637

(43)Date of publicat

ion of application : 16.09.1997

(51)Int.Cl.

C09K 15/34  
A23L 3/3481  
A61K 31/19  
A61K 31/195  
A61K 35/78  
A61K 38/00  
A61K 45/06  
B01J 20/22  
C09K 3/00

(21)Application number : 08-057678

(71)Applicant : CHUGAI PHARMACEUT CO LTD

(22)Date of filing : 14.03.1996

(72)Inventor : OKUBO KAZUYOSHI

YOSHIKI YUMIKO

(54) COMPOSITION FOR REMOVING ACTIVE OXYGEN FREE RADICAL AND REMOVAL  
THEREOF

(57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain a composition capable of removing active oxygen free radicals causing injurious actions such as cytotoxicity and preventing and reducing various disorders such as oxidative stress or aging by combining an active oxygen free radical scavenger with a specific component.

**SOLUTION:** This composition comprises (A) an active oxygen free radical scavenger (e.g. preferably catechins or a tannin-polyphenol) and (B) one or more substances selected from uronic acids (e.g. D-glucuronic acid), uronides (e.g. polyuronide-polysaccharides), mucopolysaccharides (e.g. hyaluronic acid) and amino acid-peptides (e.g. an oligopeptide comprising about 2 to several amino acids).



## \* NOTICES \*

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

## CLAIMS

### [Claim(s)]

[Claim 1]A constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 2]The constituent according to claim 1 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 3]A constituent for active oxygen radical removal containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 4]The constituent for active oxygen radical removal according to claim 3 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 5]An active oxygen [ using an active oxygen radical scavenger and one sort or two sorts or more of substances chosen from uronic acid, uronide, a mucopolysaccharide, and amino acid and peptide ] radical removing method.

[Claim 6]The according to claim 5 active oxygen [ which is one sort or two sorts or more of substances chosen from catechin, tannin polyphenol, anthocyanine, flavonoids and saponins ] radical [ an active oxygen radical scavenger ] removing method.

[Claim 7]An antioxidant containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 8]The antioxidant according to claim 7 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 9]An antioxidant method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 10]An antioxidant method according to claim 9 that active oxygen radical scavengers are one sort or two sorts or more of substances chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 11]An antiaging agent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 12]The antiaging agent according to claim 11 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 13]An aging prevention method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 14]An aging prevention method according to claim 13 that active oxygen radical scavengers are one sort or two sorts or more of substances chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 15]A quality degradation inhibitor containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 16]The quality degradation inhibitor according to claim 15 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 17]A quality degradation prevention method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 18]The quality degradation prevention method according to claim 17 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 19]A decomposition prevention agent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 20]The decomposition prevention agent according to claim 19 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 21]A decomposition prevention method using a constituent containing one sort or two

sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 22]A decomposition prevention method according to claim 21 that active oxygen radical scavengers are one sort or two sorts or more of substances chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 23]A contamination inhibitor containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 24]The contamination inhibitor according to claim 23 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 25]A contamination prevention method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 26]The contamination prevention method according to claim 25 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 27]A deodorizer containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 28]The deodorizer according to claim 27 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 29]A deodorizing method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 30]The deodorizing method according to claim 29 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 31]A freshner containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide, a mucopolysaccharide, and amino acid and peptide.

[Claim 32]The freshner according to claim 31 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

[Claim 33]A freshness holding method using a constituent containing one sort or two sorts or more of substances chosen from an active oxygen radical scavenger, uronic acid and uronide,

a mucopolysaccharide, and amino acid and peptide.

[Claim 34] The freshness holding method according to claim 33 which are one sort or two sorts or more of substances in which an active oxygen radical scavenger is chosen from catechin, tannin polyphenol, anthocyanine, flavonoids, and saponins.

---

[Translation done.]